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## ABSTRACT

A study was made to standardize instruction in the Army's Leadership Preparation Program (LPP). A portion of the LPP was converted to an automated method of instruction, accomplished mostly through the use of tape-recorded lectures and supported by visual aid frames. A comparison study was then made with the conventional lecture-conference presentation. Three successive leadership preparation classes were matched on General Technical Aptitude Area scores and then randomly assigned to either an automated or conventional training section. The conclusions drawn were that: 1) use of the automated method of presenting leadership preparation training as part of the leader preparation course was effective and practical, with minimal support costs, and reduced instructor requirements; and 2) the package content may be used in a number of ways, depending on the user's need. (WCM)

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# Automation of a Portion of NCO Leadership Preparation Training

by

*Morris Showel, Elaine Taylor  
and Paul D. Hood*

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## FOREWORD

The objective of Work Unit NCO of the Human Resources Research Office has been to provide information, through research, that would assist the Army in establishing appropriate methods and techniques for developing potential noncommissioned officers as early as possible in their military careers.

Work in earlier Sub-Units of the research led to the development of the Army's Leader Preparation Program. In addition to reports already published for Work Sub-Units NCO I and II, reports are in preparation, for NCO III, on the implementation and utilization of the Program, and on a series of studies dealing with screening for leadership potential and with training in aspects of noncommissioned officer leadership.

The present report concerns a portion of the developmental work conducted under NCO III, particularly the development and evaluation of an automated method of presenting an instructional block of the Leader Preparation Course. This course is a two-week school conducted in the Leader Preparation Program.

Work Unit NCO research was conducted by HumRRO Division No. 3 (Recruit Training) at the Presidio of Monterey, California. Directors of Research during that portion of the Sub-Unit reported here were Dr. Howard H. McFann and Dr. John E. Taylor.

Military support for the study was provided by the U.S. Army Training Center Human Research Unit. Military Chief of the Unit at that time was LTC Carl E. Green.

The study was supervised by Dr. Paul D. Hood. Developmental work was conducted sequentially by Dr. Mark Silber, Dr. Elaine Taylor, and Dr. Morris Showel. Major contributions were also made by Dr. Eugene F. MacCaslin and Mr. Patrick J. Butler of HumRRO Division No. 1 (System Operations). Development of programing equipment, and of visual and training aids was conducted by Mrs. Virginia Gonzales and Mr. Benjamin J. Viljoen, with the assistance of Mrs. Marian Forayter, Mrs. Jacklyn E. Boyd, Mr. Gordon Gay, Mr. Robert F. Grant and Mr. Robert S. Ray. Scoring methodology was developed by Dr. Wayne L. Fox, Mr. Frank S. Mosely, and Mr. William H. Burckhardt.

Military assistants were MSG Sidney Springer, SFC Bernard McGuire, SP 5 Harold Christenson, and PFCs Clarence Wendt and Rex Moore.

Consultants in development of the program were Dr. Jack V. Edling (LTC Res.) and Dr. Richard P. Barthol (MAJ Res.).

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Meredith P. Crawford  
Director  
Human Resources Research Office

## **Military Problem**

In the Army's newly implemented Leader Preparation Program (LPP), potential NCO leaders are identified during Basic Combat Training (BCT) for leadership training conducted directly after BCT and during Advanced Individual Training. This recently implemented program was developed through research conducted under HumRRO Work Unit NCO.

Research and development work related to this program encountered two particular areas of concern—standardization of instruction content and method of presentation, and occasional lack of experienced instructors.

## **Research Problem**

During the course of implementation of the LPP at U.S. Army Training Centers throughout the country, there were, as was to be expected, instances of variation in the depth and breadth of the presentation of leadership preparation training by conventional lecture-conference methods. To examine the possibilities of standardizing instruction, without reducing training effectiveness or increasing support requirements and costs, the staff of HumRRO Work Unit NCO converted a portion of the Leader Preparation Course to an automated method of instruction. The experiment was conducted on an instructional block representing roughly one-seventh of the two-week course, which is conducted after BCT. The development and evaluation of this effort is reported here.

## **Research Methods**

Following implementation of the Army's Leader Preparation Program, an automated leadership training program "package" was developed, consisting of sets of tapes, film strips, student workbooks, programer, and associated scripts, operation and maintenance manual, spare parts, and so forth.

Eighteen leadership subjects, normally presented in the two-week Leader Preparation Course, were covered, including 15½ of 17 hours of the "Leadership Functions" block of instruction, one of three hours of "Leader's Duties," and one hour of "Counseling Techniques." The major portion of the automated instruction was accomplished through the use of tape-recorded lectures, supported by visual aid frames. These visual aids were presented by an automatic film strip projector, which was driven by programing signals recorded on a second track of the audio tape. The programs were designed to employ a variety of proven instructional methods, particularly an empirically tested linear program whose content and pace had been adjusted to meet student needs and capabilities. Linear-programed workbooks served to supplement, review, and interrelate the tape and slide materials and introduced an element of variation in the method of presentation.

This automated method of instruction was compared with the conventional method of lecture-conference presentation through a series of three field tryouts at Fort Ord in 1962. Members of each of three successive LPC classes were matched on General Technical (GT) Aptitude Area scores of the Army Classification Battery and then randomly assigned to either an "automated" or a "conventional" training section. Both groups were tested at the end of the block of training with an essay-type examination that had been designed to sample the content of the stated objectives of the block of instruction. A baseline, "nontrained" comparison was established between these two groups and a group of LPC candidates who were tested before leadership training.

As a follow-up, an alternate form of the essay examination was administered to the trained groups 10 weeks after completion of leadership training, at the end of their Advanced Infantry Training (AIT) cycle. Another "nontrained" group of AIT trainees with comparable GT scores was used to establish the AIT baseline.

## Results

Analysis of tests given immediately after training and 10 weeks later indicated that the automated program was *at least* as effective as the conventional training method in teaching the principles of leadership functions.

Although other results were limited in nature, the major advantage of the automated program clearly lay in its reduced "cost" of presentation. The program, while teaching effectively, had minimal requirements for the presence of instructors, thereby releasing them for other teaching responsibilities and allowing them more time for individual instruction. Support costs for the program (i.e., facilities, training aids, equipment, etc.) are minimal.

## Conclusions

The conclusions drawn were that:

(1) Use of the automated method of presenting leadership preparation training as part of the Leader Preparation Course was effective and practical, with minimal support costs, and reduced instructor requirements.

(2) In addition, the "package" content may be used in a number of ways, depending on the user's need. For example, it may be useful in defining a minimal standard of scope of content and quality of presentation of major portions of leadership training; in training make-up and remedial review; in orienting newly assigned AIT cadre to some of the objectives and nature of the LPC program; and in facilitating the training of large numbers of leaders in the event of mobilization.

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# **Automation of a Portion of NCO Leadership Preparation Training**



## BACKGROUND OF THE STUDY

In January 1962 the U.S. Army's Leader Preparation Program was implemented.<sup>1</sup> This Program, which resulted from research and development work in HUMRRO Work Unit NCO, identifies potential noncommissioned officer leaders and develops this potential while the enlisted man is still receiving his basic and advanced individual military training at the Army Training Center.

The Program involves selection of trainees in Basic Combat Training (BCT) who appear to possess the necessary qualifications: aptitude (100 or higher in their MOS Aptitude Area scores); interpersonal skills (upper 50% of a buddy rank-rating of leadership potential given in the fifth week of BCT); adaptability to Army living, and willingness to undergo leader preparation training (as determined by screening interviews conducted by the BCT company commander).

Upon completion of BCT the selected trainees attend a two-week Leader Preparation Course (LPC) and then go on to eight weeks of Advanced Individual Training (AIT). While receiving training appropriate to their MOSs in AIT, the trainees have an opportunity for supervised on-the-job practical experience in leadership by acting as squad leaders or trainee assistant platoon sergeants in the AIT company.

In the Leader Preparation Course, the leader candidates are given instruction designed to create confidence and provide each leader candidate with basic skills, enabling him to manage and move troops and assist in instructing his fellow AIT trainees in specific MOS subjects. Practical work in barracks, classroom, and field settings provides opportunity to use this knowledge in developing leadership skills. All of the LPC training is accomplished under the supervision of NCO instructors. Each course of instruction is currently (1966) presented approximately 450 times a year at the several two-week Leader Preparation Schools in operation, and the total annual output is about 10,000 trainee leaders.

Securing and maintaining an adequate number of qualified instructors has been a continuing problem at a number of the Schools. Shortages of qualified personnel and high instructor turnover rates posed problems in maintaining standardization of course content and quality of instruction. In some cases, the assigned NCO instructors had to work such long hours in platform and field instruction that they were not available to provide much in the way of individual counseling and guidance to the leader candidates.

This general situation suggested that some kind of "teaching machine" or "automation" approach to the LPC classroom presentations might be adapted with profit—an approach that would achieve standardization, alleviate requirements on instructors, and allow the instructor more time to work individually with leader candidates. Research to develop and evaluate such an automation approach was, therefore, undertaken.

<sup>1</sup>See U.S. Continental Army Command, *Education and Training. Noncommissioned Officer Leadership Education*, especially Appendix I, "Program of Instruction, Leader Preparation Course," USCONARC Regulation 350-51, January 1965.

## DEVELOPMENT OF AUTOMATED INSTRUCTION PROGRAM

Nearly all (15½ out of 17 hours) of the "Leadership Functions" block of the Program of Instruction (POI) of the two-week LPC formed the basic course content for the automated program. The content of each session was based on the set of lecture guidelines provided for the LPC, and on the text, A Guide for the Potential Noncommissioned Officer.<sup>1</sup> Two other hours of course content were drawn from the three-hour "Leader's Duties" block of instruction and from the "Counseling Techniques" period. Appendix A contains a list of the contents of the LPC and the portion of the POI for the LPC that incorporates the automated program.

In addition to providing an overview of the classes on leadership principles, the automated program covers the specific areas of supervision, mission accomplishment, attention to men's welfare, rewards and corrective action, the gaining and imparting of information, and methods of instruction.

### Instructional Materials

The major portion of the instructional material was designed to be presented by lectures recorded on magnetic tapes. Programing signals were recorded on the second track of the magnetic tape to trigger an automatic projector, which presented visual aid frames during the lectures. The result was a sound film strip that, due to the high rate of presentation of visual aid frames, tended to approximate a sound moving picture in regard to capability. A sample script with visual aid representations is presented in Appendix B.

Each period of instruction provided for the presentation of several short quizzes immediately followed by presentation of answers. These quizzes were intended to increase the active participation of the leader candidate by requiring relatively frequent confrontations with questions concerning the subject matter, providing opportunity to emphasize important points, and providing each student with some idea of his mastery of the subject matter. Following each group of automated instruction periods, an integrating exercise period was scheduled in which the students read linear-programed, question-and-answer review workbooks. Questions (and answers) are in a fixed, predetermined order, the same for all students.

Each automated session was pilot-tested with small classes of four or five students who were selected as typical of the LPC input. These pilot classes were observed on a continuous basis through a closed-circuit television and subjects were intensively questioned and tested every two to four hours throughout the entire series. Lecture and visual materials were revised on the basis of information gained in the pilot tests. The workbooks were pilot-tested in a similar fashion, and the students were required to write out complete answers to all questions and write down additional comments for each page.

### Criterion Development

While work progressed toward the production of a final version of the lecture and visual presentations, development of a suitable criterion test was

<sup>1</sup>This text was developed in earlier NCO research and published by U.S. Continental Army Command as USCONARC Pamphlet 350-24, June 1963.

begun. The cognitive nature of the instructional objectives of this book of instruction made it appropriate to rely on paper-and-pencil tests. Testing immediately upon completion of the block of training was considered most critical, since relatively immediate possession of knowledge was required in order to make applications both in the LPC and later in AIT. Retention over a short period of time was an additional criterion.

A list of instructional objectives (see Appendix C) was prepared from the LPP Lesson Guidelines and textbook and checked for accuracy and comprehensiveness by each operating Leader Preparation School.

This list was then used as a population of instructional objectives from which four samples were drawn. Each sample consisted of one item, drawn randomly from the subpool of items, for each of the subject areas covered. A second item, also drawn randomly, was selected for three of the longest and most difficult subjects. These statements were then converted to short-written-answer type test questions for each of the four samples, resulting in four alternate 18-item test forms.

Each of these 18-item test forms was administered to a group of basic trainees who were qualified for but had not attended the LPC, and to a group of LPC graduates. The average scores obtained by five persons at each of five GT aptitude levels in the trained and untrained groups were compared (so that the differences in responding to the language of the questions and differences in facility in expressing answers could be overcome in revising test questions or in specifying scoring criteria).

Three of the four or eight items in each subject area in which higher scores were obtained by the LPC graduates, and which were not unduly easy or difficult to answer, were selected to construct two Leadership Knowledge Tests. One test was a 30-item, two-hour test to be administered immediately after the LPC; the other was a 15-item, one-hour, follow-up test to be administered at the end of the eight-week Advanced Individual Training (AIT) cycle.

A scoring manual was prepared, and all tests were graded by the same group of scorers. Each page of the test booklets had been stamped with a test book code serial number to enable the pages to be separated and all the answers to a given question collected, read, and scored at the same time. The scoring instructions provided that a common sense answer or one based on experience would be as acceptable as an answer written on the basis of concepts and principles specific to the content of the course.

The following point system was developed for scoring each item:

- (1) Five points for an answer that was unusually complete or well stated.
- (2) Four points for an answer that clearly indicated the trainee had satisfactorily mastered the basic ideas covered in the objectives (could "recall," "demonstrate understanding . . .," "give examples," etc.).
- (3) Three points if the answer was incomplete in some definite respect.
- (4) Two points if the answer was partially correct but notably incomplete.
- (5) One point for some effort "in the right direction."
- (6) No points for a "no answer" or for a totally incorrect or irrelevant answer.

## COMPARISON OF AUTOMATED INSTRUCTION PROGRAM AND CONVENTIONAL INSTRUCTION METHOD

The automated program was compared with the conventional method of instruction through a series of three field tryouts that involved three LPC classes trained at Fort Ord, California, during 1962.

### Comparison Groups and Training Methods

Members of each class were matched on General Technical (GT) Aptitude Area scores and then randomly assigned to either an "automated" or a "conventional" training section.<sup>1</sup> The students were separated only for the period of time during which the classes on Leadership Functions were given. During all other periods of instruction and in the evening, they were treated alike and interacted with one another.

The conventional section was taught by a single instructor who taught all conventional classes throughout the experiment. He used his own training aids, which were typical of Army NCO Academy material, and followed the guidelines of the Program of Instruction for the Leader Preparation Program. This instructor had been involved in leader preparation training since the early experimental field tests and was a better than average NCO instructor. He was also highly motivated to give the automated program a "real contest."

The automated section was supervised by an NCO proctor who changed the programs during the 10-minute recess between instruction periods. Since most of the programs did not run the full 50-minute period, the NCO proctor answered student questions or referred them back to members of the class by conducting a class conference on the subject topic. The automated portion of the instruction took, on the average, only about two-thirds of the allotted instruction time for each of these periods.

### Administration of 30-Item Leadership Knowledge Test

At the end of the two-week LPC instruction, the 30-item Leadership Knowledge Test was administered to all 52 graduates of the three LPC classes involved in the comparison of training methods. A control baseline was established by a "nontrained" group of 26 leader candidates in another class who took the 30-item test before entering the LPC and before receiving any leadership training. Members of this group were matched on GT with the pairs of automated/conventional training subjects.

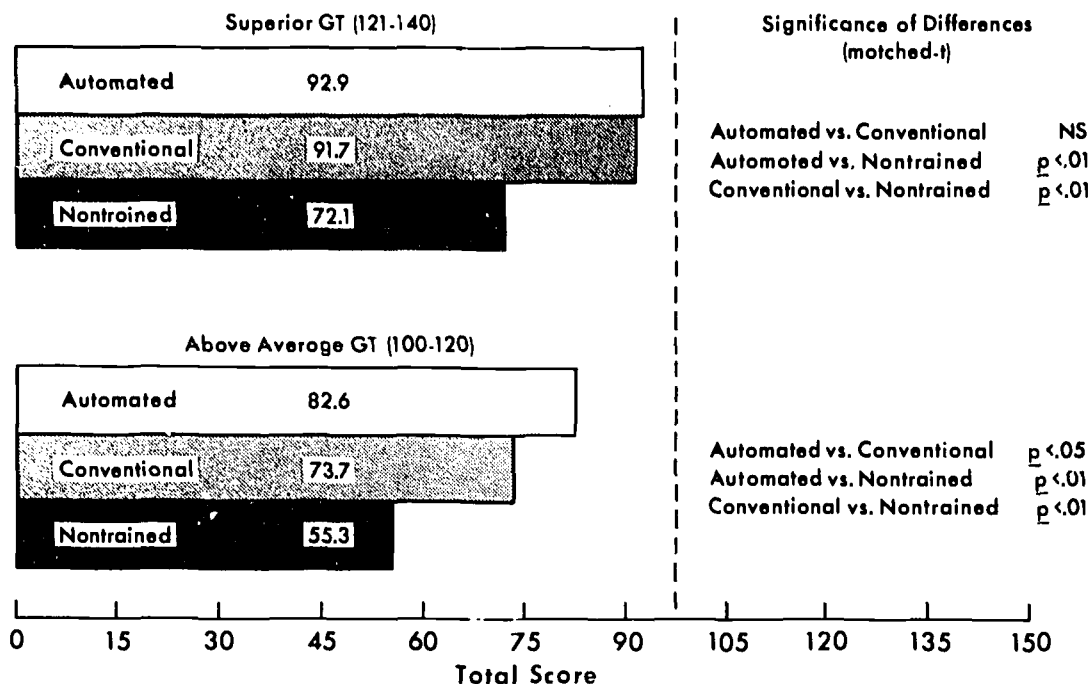
A comparison of Leadership Knowledge Test scores achieved by the automated instruction, conventional instruction, and nontrained groups is presented in Figure 1. The total sample within each group is split into "Superior" and "Above Average" GT levels.

Performance of the trained groups (regardless of training method) was significantly superior ( $p < .01$ ) to that of the nontrained groups at both GT levels.

No significant difference in performance was observed between the automated instruction and conventional instruction groups at the "Superior GT" level; however, for the "Above Average GT" level of comparison, the performance of the automated group was significantly superior ( $p < .05$ ) to that of the conventional group.

<sup>1</sup>Since it was known that the Leadership Aptitude Rating did not provide additional covariance with scores of leadership knowledge, these "buddy-ratings" were not included in the method of pairing for this study.

# Mean Scores of Automated Instruction, Conventional Instruction, and Nontrained Groups on Initial Test, by GT Level



Note:  $N$  of each group was 13.

Figure 1

## Administration of Follow-Up 15-Item Leadership Knowledge Test

Ten weeks (following AIT and Christmas leaves) after taking the 30-item test at the end of the LPC, the same automated instruction and conventional instruction groups were retested, using the 15-item alternate form of the test.

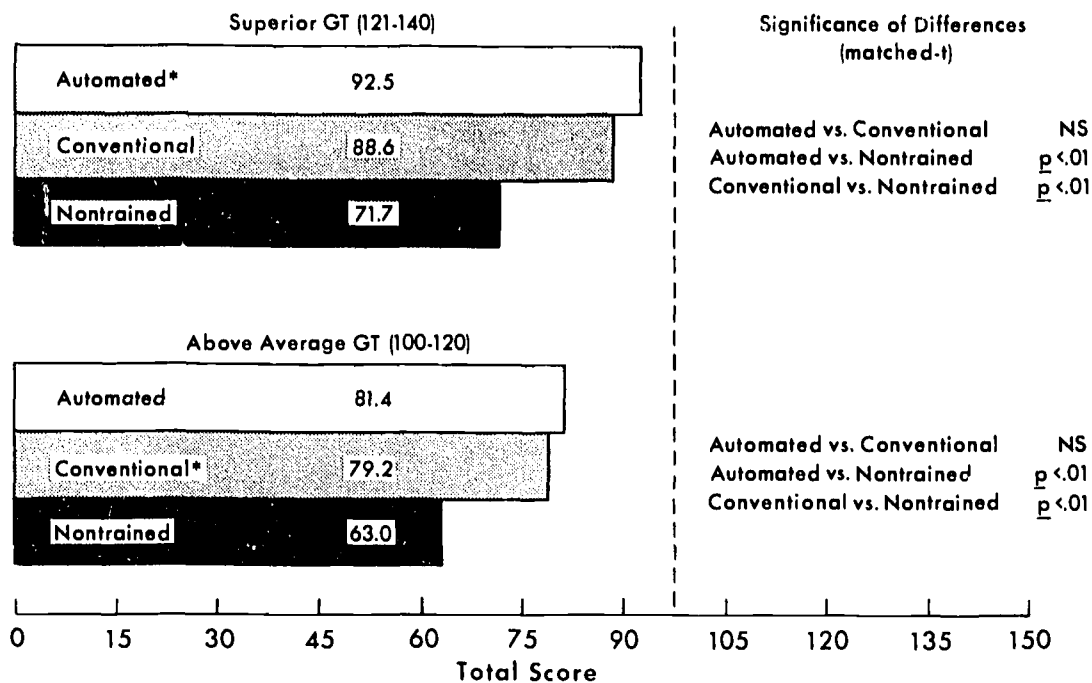
The control baseline at the end of AIT was established by a new "non-trained" group of AIT graduates because operational problems precluded using the same control group as in the initial test. The new group met the LPC entrance standards but had not attended the LPC. This control group was also matched on GT with the pairs of automated instruction and conventional instruction subjects.

The point scoring procedure for this test was the same as that used in scoring the initial test. To provide scores roughly parallel to those of the 30-item test, scores of the 15-item test were doubled. A comparison of test scores achieved by each group (again split into two GT levels) taking the 15-item test is presented in Figure 2.

Again, performance of the trained groups was significantly superior ( $p < .01$ ) to that of the nontrained groups.<sup>1</sup> There were no significant differences between the automated and conventionally trained groups at either GT level.

<sup>1</sup>The second nontrained group could be at a disadvantage in not having been exposed to the first test, but it seems unlikely that this finding of difference would be seriously altered in view of the similar difference between trained and nontrained groups found on the first test.

# Mean Scores of Automated Instruction, Conventional Instruction, and Nontrained Groups on Follow-Up Test, by GT Level



Note: \* designates  $N$  was 12;  $N$ s for all other groups were 13.

Figure 2

## DISCUSSION OF RESULTS

### Characteristics of Automated Leadership Instruction Program

Experience during the field tryouts indicated that the NCO proctor would not be continuously needed in the classroom when automated instruction sessions are being presented. Equipment can be easily operated by one or more selected students, and a faculty member would be needed only to lead discussions, answer questions, and spot-check equipment operation.

The amount of student response and feedback in the automated instruction program is much higher than in conventional instruction, although still below that in typical self-paced, individually presented programmed instruction.

While no systematic study of student attitudes was undertaken, informal inquiry revealed a variety of opinions regarding the automated instruction program. A number of men stated that they wouldn't care for the automated method of instruction as a "steady fare," would prefer shorter sequences, and wanted more opportunity for discussions. Many of the students felt "pushed" by the brisk pace of the presentation, although nearly all of the students reported that they were able to adjust to the rate after one or two instruction periods, and a few preferred working at the program rate.

Experience in the field tryouts suggested that the less qualified or motivated students preferred the conventional, "less demanding" method of instruction (their comparison being based on the conventional instruction they received



in other subject areas in the LPC). However, according to the results of the Leadership Knowledge Test, these men still performed relatively more effectively when they were "pushed."

In addition, three practical considerations regarding the automated program became clear:

(1) To employ the automated program effectively, the students must not be unduly sleepy or fatigued. During the course of the trials, the students had to stay up late several nights to prepare for a Command Maintenance Inspection at the School. A definite relation was established between low quiz scores and observed frequency with which the students fell asleep during the automated classes. The instructor in the conventional class can take suitable steps to try to keep students awake, but the automated program will not work effectively in such situations.

(2) Automated sessions should be scheduled in short blocks of two or, at most, three 50-minute hours, with a 10-minute hourly break. Adequate ventilation, suitable low (but not totally darkened) lighting of the classroom, attention to comfort (e.g., removal of outer clothing when hot), and insistence that students vacate the classroom and move about to get some exercise during breaks are also important.

(3) Time should be provided for questions and discussion. Although the automated classes were designed to anticipate and answer frequently encountered questions, they cannot provide the opportunity to clarify a particular point or discuss a specific topic at length. This capability has to be provided by a faculty or student discussion leader. Time for such discussion sessions was found to be available at the end of some automated classes and in the evenings.

### Comparison of Training Effects

The means of the scores obtained on the Leadership Knowledge Tests by the automated instruction, conventional instruction, and nontrained groups are presented in Table 1. As has been noted, all trained groups performed significantly better than nontrained groups. Since this has been established, the ensuing discussion will deal solely with the effects of the training methods under comparison.

Table 1

#### **Mean Leadership Knowledge Test Scores for Automated Instruction, Conventional Instruction, and Nontrained Groups**

Group	LPC Test (30-Item)			AIT Test (15-Item) <sup>a</sup>		
	N	Mean	SD	N	Mean	SD
Automated	26	87.4	12.4	25	87.0	13.4
Conventional	26	82.3	14.8	25	84.0	13.4
Nontrained (LPC test)	26	63.7	17.2	—	—	—
Nontrained (AIT test)	—	—	—	26	67.4	10.5

<sup>a</sup>Scores from the 15-item test were doubled to provide a rough similarity with scores from the 30-item test.

The means of the scores obtained on the Leadership Knowledge Tests by the trained groups at two GT levels are presented in Table 2.

Table 2  
Mean Leadership Knowledge Test Scores of  
the Trained Groups by GT Level

Group by GT Level	LPC Test (30-Item)		AIT Test (15-Item)	
	Mean	SD	Mean	SD
Superior GT (121-140)				
Automated Group	92.9	11.0	92.5	12.5
Conventional Group	91.7	10.8	88.6	14.9
Above Average GT (100-120)				
Automated Group	82.6	10.5	81.4	12.4
Conventional Group	73.7	11.5	79.2	10.0

Results of the 30-item test suggested that the "Superior GT" groups were able to assimilate the leadership instruction in the LPC equally well, regardless of training method. As had been anticipated, the "Above Average GT" groups did not achieve scores as high as those of the more apt "Superior GT" students. However, the mean score of the "Above Average GT" group that received automated instruction was only 10.3 points below the mean of its "Superior GT" counterpart, while the mean score of the "Above Average GT" group that was conventionally trained was 18.0 points below the mean of its counterpart group. This "leveling" effect suggested that the less able student group trained by the automated program benefited more from training than did any of the other trained groups.

The scores the conventionally trained groups achieved on the 15-item test that followed AIT suggested a "Leadership Knowledge" decrement for the "Superior GT" group and an increment for the "Above Average GT" group; the gap of 18.0 points between the scores of these groups had closed to 9.4 points. In contrast, at both GT levels the groups receiving automated instruction had essentially the same scores on the follow-up examination as they did immediately after LPC instruction.

The improvement shown on the retention test by the conventionally trained group of "Above Average" aptitude suggests they may have profited from the added nonacademic presentation of principles given them in AIT, thereby approaching the level of knowledge achieved by the automated group of "Above Average" aptitude.

Those groups receiving automated instruction attained higher levels of formal leadership knowledge during the LPC and the groups at both aptitude levels maintained these higher knowledge levels through varied situational contexts in AIT. Apparently, practical experiences encountered in AIT affected the levels of leadership knowledge of the conventionally trained groups, but did not affect the levels of leadership knowledge established in the LPC by means of the automated instruction program.

## CONCLUSION

Automated programs, such as that reported here, provide their greatest value in defining a standard of scope of content and quality of presentation. In the usual class situation in the Army, the subject presentation is variable, depending upon the experience and capability of the platform instructor. Even



the best instructor may not be capable of imparting the necessary basic knowledges to each of his classes with a reliable degree of uniformity. Automated presentation, on the other hand, precludes this variability.

In the subjects covered by the reported study, automated presentation proved to be at least as effective as a platform instructor in imparting leadership knowledge, and those students who learned through the automated method appeared to retain their knowledge better than the conventionally trained students.

A tested automated program of training can provide an effective, low-cost substitute when increased training demands create a shortage of qualified "live" instructors. And, such a "packaged" program has inherent capabilities that surpass those of the best live instructor—an automated program can be available at any time, to any number of trainees, to provide remedial review, make-up training, briefing for newly assigned training faculty, or a refresher course for faculty.

In addition to low cost and flexibility of scheduling, an effective program has the capability of presenting uniform quality of training to groups that may be widely distributed geographically, as is the case with Army Reserve units and ROTC programs.

As a consequence of the field tryouts reported here, it was felt that the use of automated instruction would be a practical and effective method for imparting the leadership knowledge required as an objective of the "Leadership Functions" portion of the LPC. The basic materials necessary for incorporation of the automated instruction into the LPC were provided by HumRRO Division No. 3 (Recruit Training) to all Leader Preparation Schools. These materials, along with scheduling guides and a suggested training schedule, are described in Appendices D and E.

## **APPENDICES**

## Appendix A

### CONTENTS OF LEADER PREPARATION COURSE (LPC), INCORPORATING AUTOMATED INSTRUCTION, AND LEADER PREPARATION CLASSES GIVEN DURING ADVANCED INDIVIDUAL TRAINING (AIT)<sup>1</sup>

<u>SUBJECT</u>	<u>HOURS</u>
I. Classes Not Specific to an MOS (Given in LPC)	
A. Orientation Subjects. . . . .	3
1. General Orientation to Preparation Course . . . . .	1/2
2. Leadership Orientation to Preparation Course . . . . .	1/2
3. Introduction to Observer System . . . . .	1/2
4. Introduction to Supervised Study . . . . .	1/2
5. History and Traditions. . . . .	1
B. Leadership Functions. . . . .	17
1. (A) Preview of Leader Activities . . . . .	1
2. (A) Know Your Men. . . . .	1/2
3. (A) Setting the Example . . . . .	1/2
4. (A) Getting Information . . . . .	1
5. (A) Planning and Organizing. . . . .	1
6. (#) Workbook #1: Preparation Phase of a Mission . . . . .	1
7. (A) Giving Information . . . . .	1
8. (A) Supervising and Inspecting . . . . .	1
9. (A) Methods of Informal Instruction . . . . .	1/2
10. (X) Methods of Informal Instruction: Practical Work, Part 1 . . . . .	1/2
11. (A) Motivating . . . . .	1
12. (A) Rewards and Corrective Actions . . . . .	1
13. (#) Workbook #2: Conduct Phase of a Mission. . . . .	1
14. (A) Use Your Subordinates . . . . .	1/2
15. (A) Coordinating With Other Leaders. . . . .	1/2
16. (X) Methods of Informal Instruction: Practical Work, Part 2 . . . . .	1
17. (A) Coordinating With Superiors . . . . .	1
18. (A) Handling Problems and Complaints. . . . .	1
19. (A) Representing Your Men . . . . .	1
20. (#) Workbook #3: Looking Out for Men's Welfare . .	1
C. Drills, Formations, Inspections, and Ceremonies . . . . .	9

<sup>1</sup>A indicates automated classes; # indicates workbooks, which can be scheduled during evening hours if desired; and X indicates conventional classes.

<u>SUBJECT</u>		<u>HOURS</u>
D. Field Exercises . . . . .		25 1/2 †
1. Field Exercise I . . . . .	4	
2. Preparation for Field Exercise II . . . . .	2 1/2	
3. Field Exercise II . . . . .	19	
E. Leader's Duties . . . . .		3
1. (X) Preparation for Inspection . . . . .	1/2	
2. (A) In Garrison: Evening . . . . .	1/2	
3. (A) In Garrison: Morning . . . . .	1/2	
4. (X) Training Day . . . . .	1	
5. (X) Care and Cleaning . . . . .	1/2	
F. Leadership Problems . . . . .		6
1. (X) Evening in Garrison . . . . .	1	
2. (X) Morning in Garrison . . . . .	1	
3. (X) Problem Personnel . . . . .	2	
4. (X) First Week in AIT . . . . .	2	
G. (A) Counseling Techniques . . . . .		1
H. Housekeeping (Scheduled only) . . . . .		9 1/2
1. Preparation for Inspection . . . . .	2	
2. Care and Cleaning . . . . .	7 1/2	
I. Supervised Study . . . . .		9
J. Examinations and Critiques . . . . .		2 1/2
K. Inspection (Scheduled only) . . . . .		1
L. Commencement Ceremony . . . . .		1/2
M. Leadership NCO Time (LNCO Time) . . . . .		3
N. Peer Ratings . . . . .		1/2
O. Critique of Program . . . . .		1/2
P. Visit of Graduate . . . . .		1/2
Total Hours Not Specific to an MOS		91 1/2
II. Classes Specific to an MOS (Given in LPC) . . . . .		29
A. Orientation to MOS . . . . .	1	
B. MOS Training . . . . .	28	
Total Hours in Preparation Course		120 1/2
III. Classes Not Specific to an MOS (Given in AIT) . . . . .		
A. Orientation Subjects . . . . .		2
1. Meet Company Officers and NCOs . . . . .	1/2	
2. Duty Assignments in AIT Company . . . . .	1/2	
3. Company Standards and Policies . . . . .	1	
B. Preview-Review Subjects . . . . .		8
Total Hours in AIT Phase		10

†Includes sleeping overnight in the field.

## Program of Instruction for Automated Portions of Leader Preparation Course

SUBJECT	HOURS	SCOPE	TYPE OF CLASS <sup>1</sup>
.....			
<u>B. Leadership Functions</u>			
1. Preview of Leader Activities	1	Introduction to automated instruction, and a preview of the major leader functions to include their interrelation and examples of their occurrence in garrison and field situations.	Automated
2. Know Your Men	1/2	The purpose of this period is to acquaint the leader candidate with the need to know his men. Topics covered include: the types of information that he needs to know, how to acquire this information, and how the information should be used. The trainee's inadequacy in this area will be pointed out.	Automated
3. Setting the Example	1/2	The purpose of this period is to alert the leader to the fact that his behavior serves as an example to his men whether he intends it or not, and to the fact that the leader's example is an effective device to motivate his men. Topics included are the kinds of examples the leader can set (with emphasis upon personal appearance and bearing), attitude and motivation, use of initiative, proper decorum, diligence, and enthusiasm. Examples will be drawn from both garrison and field situations.	Automated
4. Getting Information	1	The purpose of this period is to acquaint the leader candidate with the kinds of information that he needs to know in order to perform effectively, and to show him how to secure and retain this information. Examples will be drawn from both garrison and field situations. Emphasis will be placed on the need for the leader to use his initiative.	Automated

<sup>1</sup>All the classes discussed here were conducted in the classroom.

SUBJECT	HOURS	SCOPE	TYPE OF CLASS
5. Planning and Organizing	1	The purpose of this period is to acquaint the leader candidate with the need to plan, how to plan, and the things that must be covered in a good plan. Examples will be drawn from both garrison and field situations. The need to organize the squad and prepare squad SOPs will be emphasized. Leader candidates will plan a garrison task as a specific application exercise.	Automated
6. Workbook #1; Preparation Phase of a Mission	1	The purpose of this exercise is to provide an integrated review of material presented in periods B-2 through B-5 above.	Individual, self-teaching workbook exercise
7. Giving Information (Briefing)	1	The purpose of this period is to acquaint the trainee leader with the need to keep his men informed, the kinds of information they need, and the most effective procedures for communicating and insuring that communication has been accomplished. Examples will be drawn from both garrison and field situations.	Automated
8. Supervising and Inspecting	1	The purpose of this period is to acquaint the leader candidate with the need to supervise and inspect his men's performance, and with the most effective procedures for performing these functions. Topics covered include means of getting needed information, standards of evaluation, reactions to correct poor performance on the part of the men, and problems of controlling men in the field. Examples will be drawn from both garrison and field situations.	Automated
9. Methods of Informal Instruction	1/2	The purpose of this period is to acquaint the leader candidate with effective techniques for giving informal instruction to his men.	Automated

SUBJECT	HOURS	SCOPE	TYPE OF CLASS
10. Methods of Informal Instruction; Practical Work, Part 1	1/2	The purpose of this period is to give the leader candidates an opportunity to practice giving informal instruction under the guidance of their instructor.	Role playing in classroom
11. Motivating	1	The purpose of this period is to acquaint the leader candidate with the need to motivate his men while assigning them to jobs and while they are working, and with the various techniques he can use to motivate his men. Topics included are giving the big picture, setting standards, promising rewards or threatening punishment, indicating confidence in the man's ability, and setting an example. Examples will be used from both field and garrison situations.	Automated
12. Rewards and Corrective Actions	1	The purpose of this period is to acquaint the leader candidate with the need to post-motivate his men and with the most effective procedures for performing this function. Topics covered include the types of rewards and punishment the leader candidate can administer, the relative effectiveness of different types of rewards and punishment, and when and how to administer rewards and punishment. Examples will be used from both garrison and field situations.	Automated
13. Workbook #2: Conduct Phase of a Mission	1	The purpose of this exercise is to provide an integrated review of materials presented in periods B-2 through B-12 above.	Individual, self-teaching workbook exercise
14. Use Your Subordinates	1/2	The purpose of this period is to acquaint the leader candidate with the proper relationship he should establish with his subordinates and the selection and utilization of key subordinates to assist him in leading his unit.	Automated

SUBJECT	HOURS	SCOPE	TYPE OF CLASS
15. Coordinating With Other Leaders	1/2	The purpose of this period is to acquaint the leader candidate with the importance of working closely and cooperatively with other trainee leaders in his unit and with the various ways in which he should coordinate and cooperate with other trainee leaders.	Automated
16. Methods of Informal Instruction: Practical Work, Part 2	1	The purpose of this period is to give the leader candidates additional experience in giving informal instruction under the guidance of their instructor.	Role playing
17. Coordinating With Superiors	1	The purpose of this period is to acquaint the leader candidate with the kind of relationship he should maintain with the cadre. Topics included are using the chain of command, showing loyalty, seeking advice, and keeping the cadre well informed.	Automated
18. Handling Problems and Complaints	1	The purpose of this period is to alert the leader candidate to the need to deal with the problems and complaints of his men. Topics included here are ways to recognize problems and complaints, appraisal of the legitimacy of problems and complaints, and the course of action that should be followed to deal with them. Attention will be directed to situations which may give rise to problems and complaints, how to avoid such situations, and how to deal with them if they cannot be avoided. Examples will be drawn from both garrison and field situations.	Automated
19. Representing Your Men	1	The purpose of this period is to acquaint the leader candidate with the procedure for bringing serious problems and complaints to the attention of his superiors in order to secure their assistance.	Automated



SUBJECT	HOURS	SCOPE	TYPE OF CLASS
20. Workbook #3: Looking Out for Men's Welfare	1	The purpose of this exercise is to provide an integrated review of materials covered earlier in the classes on Handling Problems and Complaints, Counseling Techniques, and Representing Your Men.	Individual, self-teaching workbook exercise

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E. Leader's Duties

.....

2. In Garrison: Evening	1/2	The purpose of this period is to acquaint the leader candidate with the duties normally performed by the trainee leader in the barracks and company area in the evening.	Automated
3. In Garrison: Morning	1/2	The purpose of this period is to acquaint the leader candidate with the duties normally performed by the trainee leader in the barracks and company area in the morning.	Automated

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G. Counseling Techniques

1	The purpose of this period is to acquaint the leader candidate with the techniques of counseling as a device to handle personal problems, complaints, and discipline problems presented by his men.	Automated, student-led exercise
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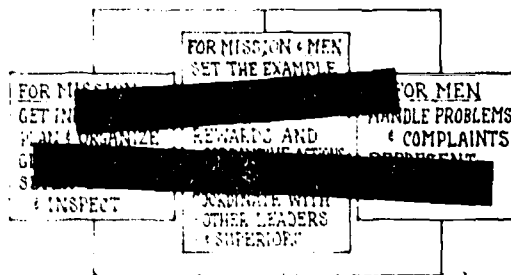
## Appendix B

### SAMPLE OF SCRIPT: PREVIEW OF LEADER ACTIVITIES

(SLIDE 1)

Start

(SLIDE 2)



This period will be on the topic—Preview of Leader Activities. This is your first class on leadership in what we call the Leader Preparation Course. By this time you know what you are doing here, but before you can know what we expect of you, you must realize your own importance, your role on any future battlefield and all that it involves. This is not done to flatter you, though it may, and it is not done to scare you, though it may.

(SLIDE 3)



It is done to point up a plain and sometimes painful fact; in the Army's complex chain of command you are the most crucial link. You and thousands like you who lead the squads are the ones who determine whether the General's plans are carried out, the hill is taken, the battle won.

(SLIDE 4)



Though your job is important, don't expect congratulations. Life in garrison is dull—you train over and over and over again, until you can do automatically the essential things a leader must do to carry himself and his squad through combat alive.

(SLIDE 5)



And when you are not training others, or being trained yourself, you are getting ready to train—or fight—by maintaining yourself and your equipment combat-ready.

(SLIDE 6)



Even though there are no bands, no clean uniforms, no proud parents, or admiring girls, and, often, not even companions, life in combat is far from dull. You will be forced to expose yourself to insure the lives of your men. With platoons stretched into thin drab lines you have your subordinates to look after and your superiors to obey.

(SLIDE 7)



In the loneliness of your hole you often have only yourself for companionship. Your fellow squad leaders are far down the line, lonely as yourself.

But while lonely, you are not alone because you live with fatigue, dirt, and possibly death. There is little rest for the bone-tired squad leader, little relaxation from the constant pressure of "kill or be killed." This is not a pleasant picture; it is not meant to be, but it is an honest one.

(SLIDE 8) SL marching squad in garrison

But our training here in the Leader Preparation Course has a more immediate aim. When you leave here, as you know, you are going to be squad leaders or assistant platoon sergeants in a training company. In addition, you may also be called to assist committees in training the troops in your company by acting as assistant instructors.

(SLIDE 9) SL holding squad meeting in platoon bay

So it is that the bulk of the leadership training you will receive in the next two weeks will equip you to handle first, your job as squad leader in a training company, and, to a slightly lesser degree, your job as an assistant instructor. If you can handle yourself as a squad leader in a training company, you will have taken the first step towards becoming a noncommissioned officer.

(SLIDE 10) Close up of SGT

How can we teach you HOW to be an effective squad leader? The trained and experienced veteran leader does certain things that get the job, whatever it may be, done quicker, better, and more effectively than the "green" untrained, and inexperienced leader. One of the major portions of this training program is devoted to giving you what amounts to a shortcut to this knowledge; the benefit from years of experience of veteran squad leaders.

.....

(SLIDE 46) SL supervising his men

Supervising and inspecting your men will occupy a large amount of your time as a leader. It is never enough to assign your men to a job and then walk off and leave them alone. There are jobs which are involved and complex, and you should supervise these while they are in progress.

(SLIDE 47)



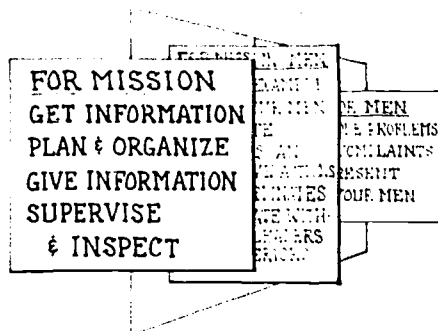
There are other simple tasks which you can simply check after they are finished. But never fail to inspect finished work that you have assigned. If you don't check, your men will soon get the idea that you are not really interested in the job anyway and begin to "sluff off," and that's when you start hurting.

(SLIDE 48)



It's not enough to know that you should supervise and inspect. You must also know what to do when your men make mistakes. How do you correct a man? (PAUSE) You must know what to do when the situation changes and when what your men are doing no longer makes sense. How do you get the word to your men when they're spread out and there's noise and confusion?

(SLIDE 49)



You'll have to know the answers to these and many other questions before you'll feel confident in your ability to accomplish missions.

(SLIDE 50)

## FOR MISSION

- 1.
- 2.
- 3.
- 4.

We've now covered four leader activities which are directly connected with accomplishing a mission. Let's have a quiz and see how much you remember. Take out a piece of paper and a pencil. Title the paper FOR MISSION: Then list the four leader activities we've covered so far. Put them in the order in which we have discussed them. You will have one minute.

AFTER 30 SECONDS

You have 30 seconds left.

AFTER 30 SECONDS

OK, stop writing.

(SLIDE 51)

## FOR MISSION (TO ACCOMPLISH A JOB)

FIND OUT WHAT HAS TO BE DONE  
( *GET INFORMATION* )

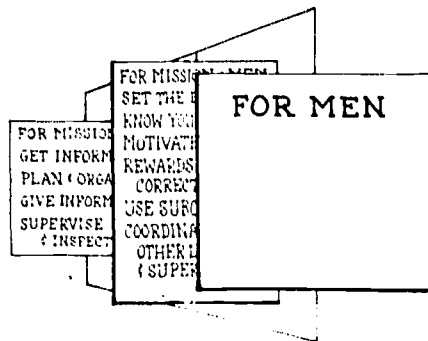
DECIDE HOW TO DO THE JOB  
( *PLAN & ORGANIZE* )

TELL THE MEN ( *GIVE INFORMATION* )

CHECK MEN'S WORK ( *SUPERVISE*  
& *INSPECT* )

Now let's see how you did. Check your answers and correct them if they are wrong. The first step in accomplishing a mission is to get the information you need. (PAUSE) Second, take the time to plan and organize how you're going to carry out the mission. (PAUSE) Third, give information to your men . . . tell them what you want them to do. (PAUSE) And fourth, supervise and inspect their work. (PAUSE) How did you do? (PAUSE) Remember, the idea is the important thing. The key words should only help you to remember the idea.

(SLIDE 52)



We're now ready to start on the second of a leader's two major responsibilities. . . . to look out for his men's welfare. Your men are the tools by which you accomplish any job. You've got to keep your men's morale high. You've got to keep them motivated, and this means you've got to look out for their welfare.

.....

(SLIDE 67)

#### SL shining boots

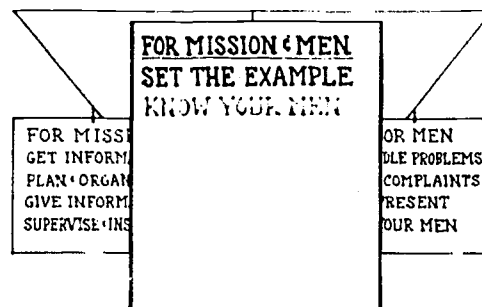
If you want sharp uniforms and shiny boots, you can guess whose have to be sharper and shinier. If you want your men to work without complaining, you have to do the same. And if you want your men to take their training seriously, you've got to take the training seriously too.

(SLIDE 68)

#### Cartoon

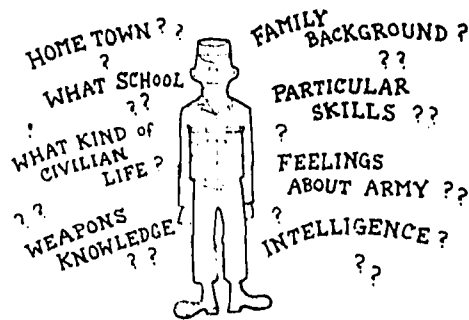
Setting the example goes right along with the other leader activities we've covered so far. They're all connected. You can't set an example unless you know the kind of an example to set, and this, of course, involves getting information. How you plan and organize your work will set an example for how your men will plan and organize their work. How you handle your problems and complaints will set an example for how your men handle theirs.

(SLIDE 69)



Another thing you must always do is know your men and use your knowledge to the best advantage. Now what are some of the things you should know about your men? Of course, you'll need to know their names and what they look like. But what else?

(SLIDE 70)



What about the man's family background, his home town, the school he went to, the things he did in civilian life? How does he feel about being in the Army? What about his intelligence or his knowledge of weapons?

(SLIDE 71)



Knowing these things about your men is not just curiosity on your part because having this knowledge will help you do all of the activities we've covered so far. Knowing your men tells you which one needs to have things explained five times and which one needs things explained only once.

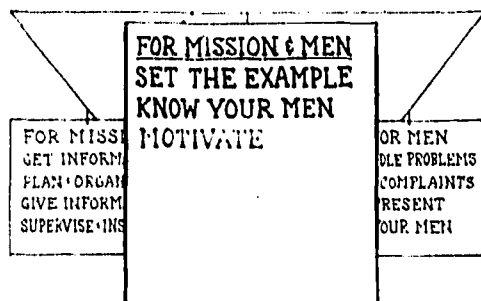
(SLIDE 72)



Knowing them helps you spot those with problems and complaints which should be handled. And, of course, knowing your men goes right along with getting information because it means getting information about your men.



(SLIDE 73)



Another activity that will help you both accomplish the mission and look out for your men's welfare is motivate. Motivating is everything you do to get your men to want to work, to want to do a good job.

(SLIDE 74)



Of all the leader activities, motivation is probably the hardest for the young leader to understand because often you can't see it operating. Motivation is part of all the other leader activities because everything you do in some way makes for high or low motivation.

(SLIDE 75)

Sharp looking SL pointing out spot to man

How you wear your uniform, how you brief your men, how you supervise them, how you handle their problems and complaints, all affect your men's motivation. Whether or not your men want to really put-out for you is determined by the many small things you say and do.

(SLIDE 76)

FOR MISSION AND MEN

Set the example

Know your men

Motivate

Rewards and corrective actions

A special kind of motivation that you will learn about is how to give rewards or take corrective actions. These are two very hard things for a young leader to do properly.

.....

## Appendix C

### SAMPLE LIST OF TRAINING OBJECTIVES FROM LEADERSHIP FUNCTIONS BLOCK AND ASSOCIATED SUBJECTS<sup>1</sup>

#### PREVIEW OF LEADER ACTIVITIES

- 01-1 Trainee can explain the importance of the squad leader in the Army chain of command.
  - 01-2 Trainee can describe two main responsibilities which every leader has.
  - 01-3 Trainee can describe four leader activities which are primarily concerned with accomplishing a mission.
  - 01-4 Trainee can describe two leader activities which are primarily concerned with looking out for the man's welfare.
  - 01-5 Trainee can describe five leader activities which apply both when accomplishing a mission and looking out for the men's welfare.
- .....

#### KNOW YOUR MEN

- 02-1 Trainee can describe various things that a squad leader should know about his men.
  - 02-2 Trainee can obtain accurate and complete information regarding important background characteristics of other trainees in his MOS.
  - 02-3 Trainee can explain how a leader can get information about his men (get to know his men) without, at the same time, appearing to be prying and nosey.
  - 02-4 Trainee can explain how having knowledge about his men (knowing his men) helps a leader perform leader activities more effectively.
  - 02-5 Trainee can explain the dangers a leader risks in becoming too familiar, or "buddy-buddy," with his men.
- .....

<sup>1</sup>This list is taken directly from a set of cards that listed one numbered item per card. Since each item was intended to be interpreted without context, the apparent redundancy in this organized form was unavoidable.

## REWARDS AND CORRECTIVE ACTIONS

- 10-1 Trainee can explain how giving rewards to men for work well done fits in with the need to accomplish the mission.
  - 10-2 Trainee can explain how taking corrective action against men who have failed to perform properly fits in with the need to accomplish the mission.
  - 10-3 Trainee can describe the kinds of rewards that a trainee leader in AIT normally can give to men who have done good work.
  - 10-4 Trainee can describe the kinds of corrective actions that a trainee leader in AIT normally can take when his men have done poor work.
  - 10-5 Trainee can describe the things that a leader should consider when deciding if a man has earned a reward or deserves corrective action.
  - 10-6 Trainee can explain what is meant by the principle, "corrective action should be taken for motivation failures only."
  - 10-7 Trainee can explain the best procedure to be followed when giving a man a reward or taking corrective action against a man.
- .....

## Appendix D

### MATERIALS PROVIDED LEADER PREPARATION SCHOOLS FOR PRESENTATION OF AUTOMATED PROGRAM

#### Basic Materials

##### *Automated Leadership Training Program: Equipment Requirements*

This document describes the equipment each training center will need, the circuitry of the Programmer, and the use of external speakers.

##### *Automated Leadership Training Program: Instructor's Guide*

This document describes the automated equipment and materials needed for any automated training class, the procedure for connecting the automated equipment, how to conduct an automated class, how to conduct an automated class without the use of the Programmer, how to disconnect the automated equipment, troubleshooting, and preventive maintenance.

##### *Automated Leadership Training Program: Script For Each Of 18 Different Automated Classes*

This document lists the automated equipment and materials needed for a particular automated class and presents a verbatim account of the narration on the tape and the pictures on the film strip.<sup>1</sup>

One film strip for each of 18 different automated classes.<sup>1</sup>

One tape recording for each of 18 different automated classes.<sup>1</sup>

Three workbooks (designed for self-study).<sup>1</sup>

Two lesson outlines designed for practical work in informal instruction. See *Lesson Outlines*.

Checksheet used to evaluate informal instruction. See *Lesson Outlines*.

#### Automation Equipment

One set of automation equipment including a Programmer with accessory electronic equipment, spare parts, labels, etc. (See *Automated Leadership Training Program: Equipment Requirements* for details.)

#### Automated Leadership Training Program Materials

Three *scripts*, one *tape recording*, and one *film strip* were provided for each of the following classes:

1. *Preview of Leader Activities*, 19 Feb 1963.
2. *Set the Example*, 25 Feb 1963.
3. *Know Your Men*, 25 Feb 1963.

<sup>1</sup>See *Automated Leadership Training Program Materials* below for a complete description.

4. *Getting Information*, 25 Feb 1963.
  5. *Planning and Organizing*, 6 March 1963.
  6. *Giving Information*, 28 Feb 1963.
  7. *Supervising and Inspecting*, 1 March 1963.
  8. *Methods of Informal Instruction*, 8 March 1963.
  9. *Motivating*, 8 March 1963.
  10. *Rewards and Corrective Actions*, 13 March 1963.
  11. *Use Your Subordinates*, 15 March 1963.
  12. *Coordinating With Other Leaders*, 18 March 1963.
  13. *Coordinating With Superiors*, 18 March 1963.
  14. *Handling Problems and Complaints*, 15 March 1963.
  15. *Counseling Techniques*, 14 March 1963.
  16. *Representing Your Men*, 14 March 1963.
  17. *Leader's Duties in Garrison: Evening*, 19 March 1963.
  18. *Leader's Duties in Garrison: Morning*, 21 March 1963.
- 35 copies of each of the following workbooks were provided:
1. *Workbook #1: Preparation Phase of a Mission*, 15 Jan 1963.
  2. *Workbook #2: Conduct Phase of a Mission*, 28 Jan 1963.
  3. *Workbook #3: Looking Out for Men's Welfare*, 16 Jan 1963.

#### Lesson Outlines

Three copies of each of the following lesson outlines were provided:

1. *Methods of Informal Instruction: Practical Work, Part 1*, 6 March 1963.
2. *Methods of Informal Instruction: Practical Work, Part 2*, 6 March 1963.

50 copies of *Informal Teaching Checksheet*, 6 March 1963, were provided.

## Appendix E

### COMMENTS ON SCHEDULING OF AUTOMATED AND NON-AUTOMATED CLASSES ON LEADERSHIP

#### General Comments

The following comments were provided for general guidance in developing a schedule for any LPC.

#### Morning Classes

Whenever possible, schedule automated programs in the morning. The advantages of such a procedure are (1) students are fresher in the morning than in the afternoon, (2) mornings are cooler than afternoons. On both counts, the result is more alert and attentive students.

#### Fifty-Minute Periods

Automated programs can be scheduled within a framework of 50-minute periods. The two long automated programs must be assigned a full 50-minute period. The remaining shorter automated programs can be handled in one of two ways: (1) one automated program per period, the balance of the time in the period being devoted to comments and discussion of the material presented on tape and film; (2) two automated programs per period. The latter method will reduce the amount of time that can be devoted to comments and discussion.

#### Block Scheduling

Since the automated programs cover all of the essential ideas designed for the particular class, usually in less than 50 minutes, other classes (on leadership or on other subjects) can be started immediately upon the completion of the automated program. Again, try to leave time after each automated class for comments and discussion.

#### Massing of Automated Classes

It is recommended that not more than two hours of automated instruction be given consecutively. This means that two and, at most, three automated programs can be sequenced without a break. Breaks can be provided by allowing time for comments and discussion, and by inserting classes taught by an instructor. Preferably, large blocks of automated instruction should be broken-up by inserting classes given *outdoors*.

#### Comments and Discussion

As much as possible, allow time after each automated program for comments and discussion on the material presented. If this cannot be done after each automated program, allow time after two automated programs.

#### Scheduling

1. *Preview of Leader Activities*, 51 minutes.  
This class is designed to give the student an overview of the classes on Leadership Principles. It should be the first class on leadership.

2. *Set the Example*, 21 minutes.  
*Know Your Men*, 16 minutes.  
These two classes also are of general nature and should be given early in the leader training program. Preferably they should follow Preview of Leader Activities with no other class on leadership intervening. Classes on *other subjects* may intervene. The class on *Set the Example* should be given first. Both classes can be given within a 50-minute period, and still have time for comments and discussion.
3. *Getting Information*, 35 minutes.  
*Planning and Organizing*, 24 minutes.  
These two classes initiate the mission accomplishment area and should follow the class on *Know Your Men*, with no class on leadership intervening. The class on *Getting Information* should be given first.
4. *Workbook #1, Preparation Phase of a Mission*, 30 minutes minimum.  
This self-study workbook integrates the material covered in the programs on *Set the Example*, *Know Your Men*, *Getting Information*, and *Planning and Organizing*. The workbook should be given to the students after the four earlier classes, preferably with no classes on leadership intervening. A minimum of one-half hour should be allocated for the use of this workbook. The workbook may be completed during the evening Supervised Study session.
5. *Giving Information*, 31 minutes.  
*Supervising and Inspecting*, 35 minutes.  
These two classes complete the mission accomplishment area and should follow the classes on *Getting Information*, *Planning and Organizing*, and *Workbook #1*, with no classes on leadership intervening. The class on *Giving Information* should be given first.
6. *Methods of Informal Instruction*, 28 minutes.  
This class integrates the material covered in the programs on *Set the Example*, *Know Your Men*, *Getting Information*, *Planning and Organizing*, *Giving Information*, and *Supervising and Inspecting*. It should be given after the six earlier programs have been given. Other classes on leadership may intervene between this class and earlier classes on leadership.
7. *Methods of Informal Instruction, Practical Work, Part 1*.  
This class is designed to allow students to put into practice the material taught in *Methods of Informal Instruction (MOII)*. It should follow immediately the class on *MOII*. Both *MOII* and *Practical Work, Part 1* can be given within a 50-minute period.
8. *Methods of Informal Instruction, Practical Work, Part 2*.  
This class is designed to give students more practical work in methods of informal instruction. It should follow *Part 1*, but *other classes should intervene between Part 2 and Part 1*.
9. *Motivating*, 27 minutes.  
*Rewards and Corrective Actions*, 31 minutes.  
These two classes constitute the bulk of the training on "motivating men." They should be given following the completion of the classes concerned with mission accomplishment. No classes on leadership should intervene between these classes on *Motivating*, and *Rewards and Corrective Actions*.
10. *Workbook #2, Conduct Phase of a Mission*, 40 minutes minimum.  
This self-study workbook integrates the material covered earlier in the programs on mission accomplishment and motivating men (3,4,5,9), and should be given to the students after these earlier classes. The workbook may be completed during the evening Supervised Study session.
11. *Use Your Subordinates*, 26 minutes.  
This class may be given any time after the completion of the classes (3,4,5) concerned with mission accomplishment.

12. *Coordinating With Other Leaders*, 18 minutes.  
This class may be given any time after the completion of the classes (3,4,5) concerned with mission accomplishment.
13. *Coordinating With Supervisors*, 27 minutes.  
This class may be given any time after the completion of the classes (3,4,5) concerned with mission accomplishment.
14. *Handling Problems and Complaints*, 28 minutes.  
*Counseling Techniques*, 52 minutes.  
*Representing Your Men*, 21 minutes.  
These three classes constitute the block of instruction primarily concerned with "looking out for men's welfare." They should be given in the sequence indicated, and no classes on leadership should intervene between these three classes. They should be given following the completion of the classes concerned with mission accomplishment (3,4,5).
15. *Workbook #4, Looking Out for Men's Welfare*, 40 minutes minimum.  
This self-study workbook integrates the material covered in the three earlier classes to look out for men's welfare. It should be given to the students after the completion of these three classes. The workbook may be completed during the evening Supervised Study session.
16. *Leader's Duties in Garrison: Evening*, 20 minutes.  
*Leader's Duties in Garrison: Morning*, 25 minutes.  
*Leader's Duties in AIT: Training Day* (not automated).  
These three classes integrate the various leader activities into common situations the trainee leader will encounter. They should be given after the classes dealing with mission accomplishment (3,4,5) and after the classes concerned with "looking out for men's welfare" (14,15).
17. *Leader's Duties: Preparation for Inspection* (not automated).  
*Leader's Duties: Care and Cleaning* (not automated).  
These two classes should be scheduled in close approximation to the time when the activities (inspection or care and cleaning) are scheduled.
18. *Leadership Problems in AIT: Morning in Garrison* (not automated).  
*Leadership Problems in AIT: Evening in Garrison* (not automated).  
*Leadership Problems in AIT: Provider Personnel* (not automated).  
*Leadership Problems in AIT: First Week* (not automated).  
These four classes should be scheduled at any convenient time following the completion of classes on Leadership Principles and Leader's Duties.



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13. ABSTRACT

A method of presenting roughly one-seventh of the Army's two-week Leader Preparation Course (LPC) through automated instruction was developed. The automated instruction method included the use of tape-recorded lectures, supported by visual aid frames, and programmed workbooks. Automated presentation proved to be at least as effective as conventional instruction in imparting the leadership knowledge covered by automation. In addition, those students who learned through the automated method appeared to retain their knowledge better than the conventionally trained students. The automated method also exhibited practicality in reduction of instructor requirements, flexibility of scheduling, and consistency of level of presentation. The automated program was adopted for use at Army Training Centers presenting the LPC.

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 1 CINC US ARMY PALIFIC APO 958 SAN FRAN ATTN G3 CBT DEVEL DIV  
 2 CG SOUTHERN EUROPEAN TASK FORCE APO 16R NY  
 1 CG US ARMY JAPAN APO 343 SAN FRAN ATTN G3  
 2 CG US ARMY CARIBBEAN APO 836 N DRLEAMS ATTN CARCDO  
 1 CG US ARMY ALASKA APO 949 SEATTLE ATTN ARACD  
 2 CG US ARMY EUROPE APO 403 NY ATTN OPNS DIV  
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 2 CG FIRST ARMY FT GEO G MEADE  
 1 CG FOURTH ARMY FT SAM HOUSTON ATTN G3  
 7 CG FIFTH ARMY CHICAGO ATTN ALPOC ATTN G3  
 1 CG SIXTH ARMY PRES OF SAN FRAN ATTN AMAAV  
 1 CG EIGHTH ARMY APO 301 SAN FRAN ATTN AG-AC  
 2 CG EIGHTH ARMY APO 301 SAN FRAN ATTN G3  
 1 CLIN PSYCHOL SERV DEPT OF NEUROPSYCHIAT WALTER REED GEN HOSP  
 2 ENGR PSYCHOL LAB PIONEERING RES DIV ARMY NATICK LABS NATICK MASS  
 1 TECH LIB ARMY NATICK LABS NATICK MASS  
 1 CG US ARMY MSL COMD REOSTONE ARSNL  
 1 CG USAPA BLTVD DET TOBYHANNA ARMY DEPOT  
 1 CG ARMY ELEC PG FT HUACHUCA ATTN TECH LIB  
 1 CG 1ST AIR DEF GUIDED MSL BRGD TNG FT BLISS  
 1 SIXTH ARMY LIB DEPOT PRES OF SAN FRAN  
 5 CG FT ORD ATTN G3 TNG DIV  
 1 CG DUGWAY PG UTAH ATTN TECH LIB  
 1 DIR WALTER REED GEN HOSP INST OF RES WALTER REED ARMY MED CTR  
 1 ATTN NEUROPSYCHIAT DIV  
 1 CG HQ ARMY ENLISTED EVAL CTR FT BENJ HARRISON  
 1 DPT FOR BIDASTRONAUT PG AIR PG CTR EGLIN AFB  
 1 DIR ARMY ENGR R-D LABS FT BELVOIR ATTN TECH ODCU CTR  
 1 CG FRANKFORD ARSNL ATTN SMUFA-N640D/202-A  
 2 WALTER REED GEN HOSP INST OF RES ATTN DEPT OF PSYCHIAT NEUROPSYCHIAT DIV  
 1 CG 20 RGN ARMCDCM HARRISON ATTN AFB  
 1 CG 5TH RGN USARADCOM FT SHERIDAN ATTN G3 TNG  
 1 6TH RGN USARADCOM FT BAKER  
 1 PERS SUBSYS DIV CREW SUBSYS DRCT AERONAUT SYS DIV WRIGHT-PATTERSON AFB  
 1 DIR ARMY BD FOR AVN ACCIDENT RES FT RUCKER  
 1 FIRST ARMY MSL COMD MED APO 221 NY  
 2 CG 21ST ARMY ARSNL OVERN N J ATTN SUMPA VCI  
 1 DEF SUPPLY AGY CAMERON STATION ATTN LIB  
 1 CG ARMY CBT DEVEL COMD FT BENJ HARRISON ATTN ADJ GEN AGY  
 1 CBT OPNS RES GP ARMY CBT DEVEL COMD FT BELVOIR  
 1 ATTN OPNS ANLS HUMAN FACTORS  
 1 CG ARMY CBT DEVEL COMD FT BENNING ATTN INF AGY  
 1 CG ARMY CBT DEVEL COMD FT KNOX ATTN ARMOR AGY  
 1 CG ARMY CBT DEVEL COMD FT BRAGG ATTN SPEC WARFARE AGY  
 1 EVAL DIV DAD ARMY SIG CTR + SCH FT MONMOUTH  
 1 CHF CURRICULUM BR RESIDENT INSTR DEPT ARMY LOGISTICS MANGT CTR FT LEE  
 3 CIVILN PERS OFCR US ARMY SPT CTR ST LOUIS ATTN EMPLOYEE MEED OFCR  
 1 ARMY WAR COLL CARLISLE BKS ATTN LIB  
 1 ASST COMDT ARMY INTEL SCH FT HOLABIRD ATTN PLANS DIV DAD  
 1 COMDT COMD + GEN STAFF CG FT LEAVENWORTH ATTN ARCHIVES  
 1 DIR OF MILIT + LOGST US MILIT ACAD WEST POINT  
 1 US MILIT ACAD WEST POINT ATTN LIB  
 1 COMDT ARMY AVN SCH FT RUCKER ATTN SCH LIB  
 2 COMDT ARMY SECUR AGY TNG CTR + SCH FT DEWENS ATTN LIB  
 1 COMDT ARMED FORCES INDOSTR COLL FT LESLEY J MCNAIR  
 2 COMDT NATL WAR COLL FT LESLEY J MCNAIR ATTN CLASSF RECORDS BR LIB  
 1 MED FLD SERV SCH BROOKE ARMY MED CTR FT SAM HOUSTON ATTN STINSON LIB  
 5 DIR OF INSTR DEPT OF SCH FT KNOX ATTN CTR  
 1 COMDT ARMY ARMOR SCH FT KNOX ATTN WEAPONS DEPT  
 1 COMDT ARMY CHAPLAIN SCH FT HAMILTON  
 1 COMDT ARMY CHEM CORPS SCH FT MCCELLAN ATTN EDUC AOV  
 1 ARMY FINANCE SCH FT BENJ HARRISON  
 4 COMDT ARMY ADJ GEN SCH FT BENJ HARRISON ATTN EDUC AOV  
 1 ARMY ENG SCH FT BENNING ATTN EDUC ADV  
 1 ARMY QM SCH FT LEE ATTN LIB  
 1 COMDT ARMY QM SCH FT LEE ATTN EDUC ADV  
 1 COMDT ARMY TRANS SCH FT EUSTIS ATTN EDUC ADV  
 1 COMDT ARMY MILIT POLICE SCH FT GORDON ATTN DIR OF INSTR  
 1 CG ARMY ORD CTR + SCH ABERDEEN PG ATTN AISD-SL  
 1 ASST COMDT ARMY AIR DEF SCH FT BLISS ATTN CLASSF TECH LIB  
 10 DIR ARMY AIR CTR FT BENNING ATTN AVN OFFR  
 1 COMDT ARMY DEF INTEL SCH ATTN SI&AS DEPT  
 1 COMDT ARMED FORCES STAFF COLL NORFOLK  
 1 COMDT ARMY SIG SCH FT MONMOUTH ATTN EDUC COORD  
 1 EDUC CONSLT ARMY MILIT POLICE SCH FT GORDON  
 6 COMDT ARMY ENGR SCH FT BELVOIR ATTN AIBBS-SY  
 1 COMDT ARMY AVN SCH FT RUCKER ATTN EDUC ADV  
 1 COMDT ARMY PRIME HEL SCH FT WOLTERS  
 1 DIR OF MILIT INSTR US MILIT ACAD WEST POINT  
 1 SPEC WARFARE SCH FT BRAGG ATTN LIB  
 1 ARMY SIG CTR + SCH FT MONMOUTH ATTN TNG LIB DIV OAD  
 2 SECY ARMY ORDNANCE GUIDED MISSILE SCH REOSTONE ARSNL  
 2 COMDT WOMENS ARMY CORPS SCH + CTR FT MCCELLAN  
 1 CG ABERDEEN PG ATTN TECH LIB  
 1 COMDT ARMY QM SCH OFCR DIR OF NONRESID ACTV FT LEE ATTN TNG MEDIA DIV  
 2 DIR BRGD + BN OPNS DEPT USAIS FT BENNING  
 1 MED FLD SERV SCH BROOKE ARMY MED CTR FT SAM HOUSTON DEPT OF NEUROPSYCHIAT  
 2 DIR COMPANY TACTICS DEPT USAIS FT BENNING  
 1 SECY OF ARMY  
 1 OCS-PERS DA ATTN CHF C+S DIV  
 1 DIR OF PERS STUDIES + RES ODCSPER DA ATTN BG WALLACE L CLEMENT  
 2 AGS FOR FORCE DEVEL DA ATTN CHF TNG DIV  
 1 CHF OF ENGRS DA ATTN ENGTG-T  
 1 HQ ARMY MAT COMD R-D ORCTE ATTN AMCRD-RC  
 1 CLIN PSYCHOL CONSLT OFC OF CHF PSYCHIAT + NEUROL CONSLT OFC OF SURG GEN  
 1 ATTN LT COL MSC  
 2 CG ARMY MED R-D COMD ATTN BEHAV SCI RES BR  
 1 ARMY PERS RES OFC ATTN CRO-AR  
 2 OFC OF PERS OPNS DA ATTN DPOSS-A  
 1 STANDARDS + SYS OFC-OPD OCCUP R-D SECT ATTN DPOSS-A  
 1 ARMY PROVOST MARSHAL GEN  
 1 OFC RESERVE COMPON DA  
 2 CHF ARMY SECUR AGY ARLINGTON HALL STA ATTN ACS-G1  
 1 CHF OF R-D DA ATTN CHF TECH + INDOSTR LIAISON OFC  
 1 EDUC + TNG BR CBT DEVEL + OPNS DIV OFC OF CHF SIG OFFR DA  
 1 PERS + TNG DIV DRMC OFC OF CHF OF DRD DA  
 2 CG ARMY MED R-D COMD ATTN MEDOON-SR  
 1 ARMY PERS RES OFC ATTN CRO-AR  
 1 CG ARMY AIR DEF COMD ENT AFB  
 1 PRES ARMY ARMOR BD FT KNOX  
 1 PRES ARMY INF BD FT BENNING ATTN FE+SP DIV  
 1 PRES ARMY MAINT BD FT KNOX  
 2 PRES ARMY ARTY BD FT SILL  
 1 DIR PRES ARMY MAT COMD BD ABERDEEN PG  
 1 PRES ARMY TRANS BD FT EUSTIS  
 1 CG ARMY CBT DEVEL COMD MILIT POLICE AGY FT GORDON  
 3 CG 4TH ARMORED DIV APO 326 NY  
 1 CG 4TH ARMOR GP APO 757 NY  
 4 CG 20 ARMORED CAV REGT APO 896 NY  
 1 CG 30 ARMORED CAV REGT APO 84 NY  
 1 CG 14TH ARMORED CAV REGT APO 26 NY  
 2 CG ARMY ARMOR + ARTY FIRING CTR FT STEWART ATTN ACS-G3 TNG OFCR  
 1 1ST ARMORED DIV HQ+HQ CG FT HOOD ATTN ACS-G2  
 5 1ST INF DIV 1ST MED TANK BN 630 ARMOR FT RILEY  
 4 30 INF DIV 1ST BN 64TH ARMOR APO 36 NY  
 2 1ST TANK BN 730 ARMOR 7TH INF DIV APO 7 SAN FRAN  
 8 20 INF DIV 20 BN 68TH ARMOR APO 34 NY  
 1 CG COMPANY A 30 BN 320 ARMOR 30 ARMORED DIV (SPEARHEAD) APO 39 NY  
 1 CG 5TH BN 330 ARMOR FT KNOX  
 1 CG 30 MED TANK BN 68TH ARMOR APO 28 NY ATTN S3  
 1 CG 30 MED TANK BN 37TH ARMOR APO 36 NY  
 1 CG 4TH BN TANK BN 68TH ARMOR APO 28 NY  
 1 CG 20 BN 34TH ARMOR FT IRWIN  
 2 CALIF HQ 40TH ARMORED DIV LOS ANGELES ATTN ACS-G3  
 1 55TH COMD HQ DIV ARMY NG JACKSONVILLE FLA  
 1 CG HQ 27TH ARMORED DIV NY AIR NG SYRACUSE  
 1 TEXAS NG 49TH ARMORED DIV DALLAS  
 3 CG 30 MED TANK BN 320 ARMOR APO 29 NY  
 1 CG ARMY ARMOR CTR FT KNOX ATTN G3 AIBKGT  
 2 CG 1ST INF DIV FT RILEY ATTN G3  
 1 CG 20 INF DIV FT BENNING ATTN DIV AVN COMDR  
 3 CG 4TH INF DIV FT LEWIS ATTN G3  
 1 CG 8TH INF DIV APO 111 NY ATTN G2  
 1 CG 5TH INF DIV (MECH) FT CARSON  
 5 CG 24TH INF DIV APO 112 NY ATTN G3  
 3 CG 820 ABN INF DIV FT BRAGG ATTN G3  
 1 CG 1ST BN (INF) 30 INF (THE OLD GUARD) FT MYER  
 1 CG HQ 20 BN 6TH INF REGT APO 742 NY  
 7 CG 30 BN 6TH INF REGT APO 742 NY  
 1 CG 171ST INF BRGD APO 731 SEATTLE  
 3 CG 25TH INF DIV APO 25 SAN FRAN  
 1 CG 4TH BG 30TH INF FT SILL  
 1 CG 20 BG 31ST INF REGT FT RUCKER  
 1 CG 30 BN 19TH INF APO 104 NY  
 1 CG 1ST BN 39TH INF APO 28 NY  
 5 CG 1ST BN (MECH) 520 INF 1ST ARMORED DIV (OLD IRONSIDES) FT HOOD  
 7 4TH BN (MECH) 54TH INF FT KNOX  
 1 CG ARMY PARTIC GP NAV TNG DEVICE CTR PT WASHINGTON ATTN CODE DIA  
 1 CHF AUDIO VISUAL APPLICAT OFC ARMY PICTORIAL DIV OFC OF CHF SIG OFCR  
 1 CHF MED RES PROJ ARMY HOSP US MILIT ACAD WEST POINT  
 1 CG MILIT DIST OF WASHINGTON  
 1 HQ ARMY LIAISON GP PROJ MICH U OF MICH  
 1 CHF OF MILIT HIST DA ATTN GEN REF BR  
 1 820 ABN DIV FT BRAGG  
 5 CG 40TH ARTY BRGD AIR DEF PRES OF SAN FRAN  
 1 CG 24TH ARTY GP (AO) COVENTRY  
 1 CG 31ST ARTY BRGD AIR DEF OAKDALE PENNA  
 1 25TH ARTY BRGD AIR DEF FT KNOX  
 1 CG 459TH ARTY HAMPTON ROS ARMY TERN NORFOLK  
 1 28TH ARTY GP AIR DEF SELFRIDGE AFB  
 1 520 ARTY BRGD AIR DEF HIGHLANDS AFS  
 1 HQ NIGARA-BUFFALO DEF 31ST ARTY BRGD AIR DEF LOCKPORT  
 1 CG 45TH ARTY BRGD AIR DEF ARLINGTON HTS ILL  
 1 35TH ARTY BRGD AIR DEF FT GEO G MEADE  
 1 CG 101ST ABN DIV FT CAMPBELL  
 1 CG 1ST CAV DIV APO 24 SAN FRAN  
 1 ARMY QM R+E FEA FT LEE ATTN TECH LIB  
 1 CHF BEHAV SCI RES BR ARMY MED R-D COM

1 NAV MED RES LAB NAV SUB NAUT GROTON ATTN LIB  
 1 CO MED FLO RES LAB CAMP LEJUNE  
 1 CDR NAV MSL CTR POINT MUGO CALIF ATTN TECH LIB CODE 3022  
 1 OIC NAV PERS RES ACTVY SAN DIEGO  
 1 NAV AIR TECH INC CTR MEMPHIS  
 1 NAV NEUROPSYCHIAT RES UNIT SAN DIEGO  
 1 DIR PERS RES LAB NAV PERS PROGRAM SUPPORT ACTIVITY WASH NAV YO  
 1 NAV TNG PERS CTR NAV STA NAV YO AMNEX WASHINGTON ATTN CODE B3 LIB  
 1 COMDT MARINE CORPS HQ MARINE CORPS ATTN CODE AN-1A  
 1 HQ MARINE CORPS ATTN AX  
 1 DIR MARINE CORPS EDUC CTR MARINE CORPS SCH QUANTICO  
 1 ATTN SECDEF + CONF FILES GP  
 1 DIR MARINE CORPS INST ATTN EVAL UNIT  
 1 CHF OF NAV OPNS DP-011  
 1 CHF OF NAV OPNS DP-0712  
 1 CHF OF NAV AIR TECH TNG NAV AIR STA MEMPHIS  
 2 COMDT PTP COAST GUARD HQ  
 1 CHF OFCR PERS RES + REVIEW BR COAST GUARD HQ  
 1 OPNS ANLS OFC HQ STRATEGIC AIR COMD OFFUTT AFB  
 1 AIR TNG COMD RANDOLPH AFB ATTN ATTN  
 1 CHF SCI DIV ORCIE SCI + TECH DCS R+H HQ AIR FORCE AFSTA  
 1 CHF SPEC WARFARE DIV ORCIE OF PLANS + OPNS DCS-PLANS+OPNS  
 1 HQ AIR FORCE  
 1 CHF OF PERS RES BR ORCIE OF CIVILIAN PERS DCS-PERS HQ AIR FORCE  
 1 CHF EVAL BRIAFDPDCI CAREER DEVEL DIV ORCIE OF PERS PLAN HQ AIR FORCE  
 1 SUBSID PLANS DIV ORCIE OF PLANS DCS-PLANS + PROG HQ AIR FORCE  
 2 DIR INSPECTOR GEN AIR FORCE (AFIAS-GI) NORTON AFB  
 1 AIR FORCE STAFF COLL SCI + TECH LIAISON OFC (ATSNW) CII DN  
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 1 NATL BUR OF STANDARDS ATTN DOUGLAS V CORNOG  
 1 CHF PSYCHOL BR CIVIL AEROMED RES INST FED AVN AGY OKLAHOMA CITY  
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 1 CTR FOR RES IN SOCIAL SYS AMER U ATTN LIBN  
 1 RAYTHEON CO ELEC SERV OPNS BURLINGTON MASS  
 2 EDUC + TNG CONSULTANTS LOS ANGELES ATTN PRINCIPAL SCI  
 1 GEN DYNAMICS POMONA CALIF ATTN LIB  
 1 AVN CRASH INJURY RES SKY HARBOR AIRPORT PHOENIX ATTN TECH LIBN  
 2 MARQUARDT CORP POMONA CALIF ATTN DEPT 500  
 1 CHF PERS SUBSYS AIRPLANE DIV MS 74-90 RENTON WASH  
 1 SYLVANIA ELECTRIC PRODUCTS INC NEEDHAM HGTS MASS ATTN PERS SUBSYS MANGR  
 1 THIDKOL CHEM CORP HUMETRICS DIV LOS ANGELES ATTN LIBN  
 2 CTR FOR RES IN SOCIAL SYS FLD OFC OFSECY DEFC WARFARE SCH FT BRAGG  
 1 DIR OF RELIABILITY + VALUE ENGR BELL AEROSYS CO BUFFALO  
 1 INST FOR DEF ANLS RES + ENGR SUPPORT DIV WASHINGTON  
 1 HUGHES AIRCRAFT COMPANY CULVER CITY CALIF  
 1 DIR CTR FOR RES ON LEARNING + TEACHING U OF MICH  
 1 OHIO STATE U  
 1 EDITOR TNG RES ABSTR AMER SOC OF TNG DIRS U OF TENN  
 1 U OF CHICAGO DEPT OF SOC  
 1 GEO WASHINGTON U DEPT OF PSYCHOL  
 1 HUMAN FACTORS SECT R+D GEN DYNAMICS ELECTRIC BOAT GROTON  
 1 CTR FOR RES IN SOCIAL SYS AMER U  
 6 BRITISH EMBSY BRITISH DEF RES STAFF WASHINGTON  
 3 CANADIAN JOINT STAFF OFC OF DEF RES MEMBER WASHINGTON  
 3 CANADIAN ARMY STAFF WASHINGTON ATTN B502 TNG  
 2 CANADIAN LIAISON OFCR ARMY ARMOR BD FT KNOX  
 1 GERMAN LIAISON OFCR ARMY AVN TEST BD FT RUCKER  
 3 ACS FOR INTEL FOREIGN LIAISON OFCR TO NORWEG MILIT ATTACHE  
 1 ARMY ATTACHE ROYAL SWEDISH EMBSY WASHINGTON  
 1 NAIL INST FOR ALCOHOL RES USLO  
 1 FRENCH LIAISON OFCR ARMY AVN TEST BD FT RUCKER  
 1 BRITISH LIAISON OFCR ARMY AVN TEST BD FT RUCKER  
 1 AUSTRALIAN EMBSY OFC OF AIR ATTACHE WASHINGTON ATTN T A NAVGN SODN LOR  
 1 WORK U DEPT OF PSYCHOL  
 2 AUSTRALIAN EMBSY OFC OF MILIT ATTACHE WASHINGTON  
 2 U OF SHEFFIELD DEPT OF PSYCHOL  
 1 MENNINGER FOUNDATION TOPEKA  
 2 AMEP INST FOR RES SILVER SPRING  
 1 AMER INST FOR RES PGH ATTN LIBN  
 1 COLUMBIA U SCH OF BUS  
 1 MATHX CORP ARLINGTON ATTN TECH LIBN  
 1 AMER TEL+TEL CO NY  
 1 U OF GEORGIA DEPT OF PSYCHOL  
 1 BERLIN COLL DEPT OF PSYCHOL  
 1 GEN ELECTRIC CO SANTA BARBARA ATTN LIB  
 1 VITRO LABS SILVER SPRING MD ATTN LIBN  
 1 TENN VALLEY AUTHORITY KNOXVILLE ATTN LABOR RELATIONS OFCR DIV OF PERS  
 1 U OF GEORGIA DEPT OF PSYCHOL  
 1 U OF UTAH DEPT OF PSYCHOL  
 1 AMER INST FOR RES LOS ANGELES  
 1 AMER INST FOR RES PALO ALTO CALIF  
 1 MICH STATE U COLL OF SOC SCI  
 1 N MEX STATE U  
 1 ROWLAND + CO HADDONFIELD NJ ATTN PRES  
 1 CRAFT INC COCKEYSVILLE MD  
 2 OREGON STATE U DEPT OF MILIT SCI ATTN ADJ  
 1 TUFTS U HUMAN ENGR INFO + ANLS PROJ  
 1 AMER PSYCHOL ASSOC WASHINGTON ATTN PSYCHOL ABSTR  
 1 NO ILL U HEAD DEPT OF PSYCHOL  
 1 HELL TEL LABS INC TECH INFO LTH WHIPPANY LAB NJ ATTN TECH REPORTS LIBN  
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 2 DIR INSR RESOURCES STATE COLL ST CLOUD MINN  
 1 COLL OF WM + MARY SCH OF EDUC  
 1 SO ILLINOIS U DEPT OF PSYCHOL  
 2 COMMUNICABLE DISEASE CTR DEVEL + CONSULTATION SERV SECT ATLANTA  
 2 HOWARD RES CORP ARLINGTON  
 1 NORTHWESTERN U DEPT OF INDOSTR ENGR  
 1 NY STATE EDUC DEPT ABSTRACT EDITOR AVCR  
 1 MR BRANDON B SMITH RES ASSOC U OF MINN  
 1 CHF PROCESSING DIV DUKF U LIB  
 1 U OF CALIF GEN LIB DOCU DEPT  
 1 FLORIDA STATE U LIB GIFTS + EXCH  
 1 HARVARD U PSYCHOL LABS LIB  
 1 U OF ILL LIB SER DEPT  
 2 U OF KANSAS LIB PERIODICALS DEPT  
 1 U OF NEBRASKA LIBS ACQ DEPT  
 1 OHIO STATE U LIBS GIFT + EXCH DIV  
 1 PENNA STATE U PATTEE LIB DOCU DESK  
 1 PURDUE U LIBS PERIODICALS CHECKING FILES  
 1 STANFORD U LIBS DOCU LIB  
 1 LIBN U OF TEXAS  
 1 SYRACUSE U LIB SER DIV  
 1 U OF MINNESOTA LIB  
 1 STATE U OF IOWA LIBS SER ACO  
 1 NO CAROLINA STATE COLL DH HILL LIB  
 2 BOSTON U LIBS ACQ DIV  
 1 U OF MICH LIBS SER DIV  
 1 BROWN U LIB  
 2 COLUMBIA U LIBS DOCU ACO  
 1 DIR JOINT U LIBS NASHVILLE  
 1 U OF DENVER MARY REED LIB  
 2 DIR U LIB GEN WASHINGTON U  
 2 LIB OF CONGRESS CHF OF EXCH + GIFT DIV  
 1 U OF PGH DOCU LIBN  
 1 OFC OF DIR CATHOLIC U LIB ATTN PSYCHOL DEPT LIB  
 1 U OF KY MARGARET I KING LIB  
 1 SO ILL U ATTN LIBN SER DEPT  
 1 KANSAS STATE U FARRELL LIB  
 1 BRIGHAM YOUNG U LIB SER SECT  
 1 U OF LOUISVILLE LIB BELKNAP CAMPUS  
 1 MR BRANDON B SMITH RES ASSOC U OF MI  
 1 4TH ARMD DIV US FORCES APO NY ATTN CPT A T SMITH JR  
 1 HQ + HQ CO USAMC FT SAM HOUSTON ATTN CPT GEORGE HEINEMAN  
 1 MR SHELTON MALEY 63-45 WETHEROLE ST REGO PARK NY  
 1 DR RAYMOND C SIDORSKY GEN DYNAMICS/ELEC BOAT GROTON  
 1 MR A R WRIGHT AERODJET GEN CORP SACRAMENTO  
 1 MR WALTER C WARREN SCH OF EDUC UNIV OF SOUTHERN CALIF LOS ANGELES  
 1 DR JOHN K HEMPHILL ETS PRINCETON UNIV PRINCETON  
 1 DR BERNARD BASS LA STATE UNIV BATON ROUGE  
 1 DR SAUL SELLS TEXAS CHRISTIAN UNIV FORT WORTH